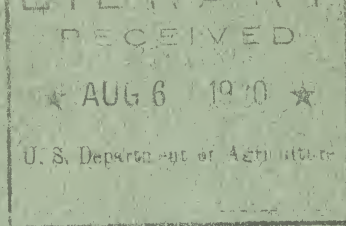


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

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DIRECTIONS FOR TAKING RUST SURVEY NOTES

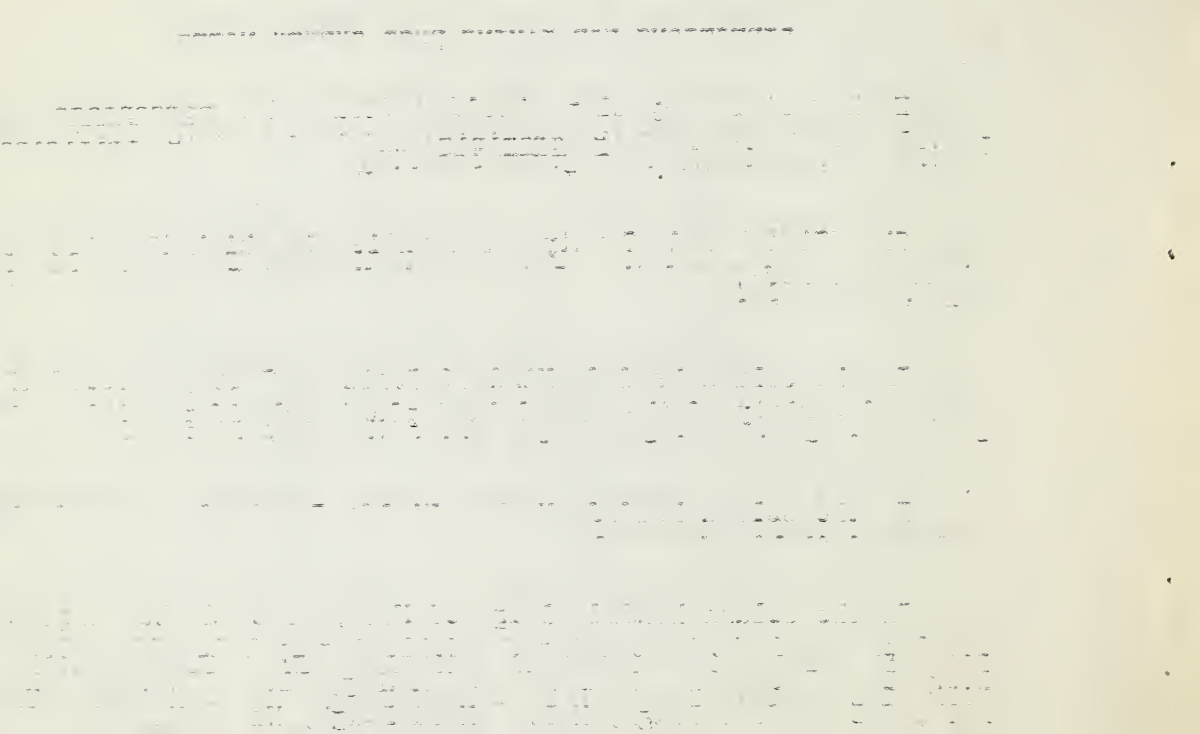
Each rust survey slip should indicate the percentage and prevalence of stem rust (P. graminis) and leaf rust (P. triticina) on the various hosts in a given locality.

The "State" and "County" or counties in which the observations were made, and the "Date," and "Nearest Town" should always be recorded.

In the column headed "Kind of Grain or Grass," record the name and variety of the cereal host plant and, if possible, the genus and species of grass upon which the rust is found.

In the column headed "Number Fields Examined," record the number of fields observed.

In the column headed "Stage of Host," record the stage of development of the host using the following symbols; Sl. = Seedling, B. = Boot, J. = Joint, H. = Heading, Fl. = Flower, Milk = Milk, S.D. = Soft Dough, H.D. = Hard Dough, Ma. = Mature. The height of the grain also may be recorded in this column.



In the columns headed "Percentage of" "Stem Rust" "Leaf Rust," record the percentage and prevalence of each rust in the form of a fraction, with the numerator representing the average percentage of rustiness of an infected plant according to the "Scale for Estimating Rust," and the denominator representing the percentage of infected plants in the field. Thus if a field were examined in which the average infected plant was 5% rusted (according to the scale) and 50% of the plants were infected with stem rust the infection would be recorded as 5/50 in the column headed stem rust. If only a few pustules were found on 4% of the plants the infection would be recorded 2p/4 or trace/4. Negative results are just as valuable as positive results and always should be recorded.

Under the heading "Remarks" may be recorded such observations as the probable date of infection, time required to find the first pustule, variation in severity of rust, estimated damage, etc.



SPECIMENS

A specimen always should be enclosed with the survey slip if the recorded infection apparently represents the first appearance of stem rust in a region, or in any case in which the observer can not be sure without microscopic examination whether the rust is stem rust or leaf rust.

When grasses can not be identified by the observer, specimens including at least one entire plant should be sent to Dr. E. C. Stakman, Rust Survey, University Farm, St. Paul, Minn. These specimens should be numbered in consecutive series by each man, and the numbers recorded on the Rust Survey Slip.

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SCALE FOR ESTIMATING RUST.

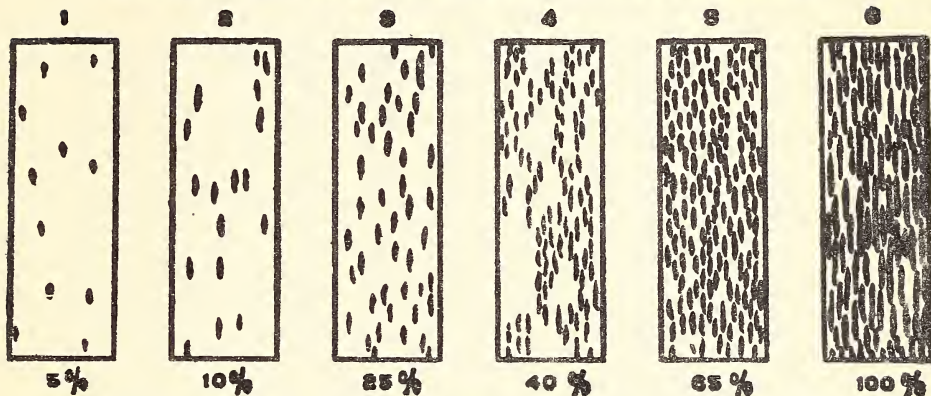


Diagram showing six degrees of rustiness, which may be used in estimating the percentage of rust infection on leaf or stem. The shaded spots represent rust, and the figures represent approximately the rust percentages computed on the basis of the maximum amount of surface covered by rust as shown in the 100 per cent figure. This figure (No. 6 in the diagram) represents 37 per cent of actual surface and is arbitrarily selected as 100 percent. Other percentages are in terms of No. 6

STATE

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RUST SURVEY

Town

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B. E. Form 11b

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